

ABSTRACT

A stream shaper for reducing turbulent flow has a plurality of circumferentially-spaced vanes, with alternate vanes being axially-spaced from the remaining vanes. This axial separation of vane groups reduces the flow restriction caused by the vanes at any given cross section along the length of the stream shaper as compared to a stream shaper having the same total number of vanes extending the full length of the stream shaper. Axially spacing alternate vanes from the remaining vanes also permits a significant reduction in the overall length of the stream shaper while providing the turbulence reducing effects of a much longer stream shaper with vanes that extend uninterrupted the full length of the stream shaper.